

We Claim:

1. An electronic component, comprising:

a semiconductor chip having an active upper side with integrated circuits, a passive rear side, side border regions;

said rear side and said side border regions of said semiconductor chip being outer package sides;

said rear side having corner regions and edge regions; and

at least said corner regions of said rear side, said edge regions of said rear side, and said side border regions of said semiconductor chip having a plastic coating with a thickness in a micrometer range.

2. The electronic component according to claim 1, wherein said rear side of said semiconductor chip is completely covered by said plastic coating.

3. The electronic component according to claim 1 wherein said plastic coating has a state, selected from the group consisting of a softened state and a melted state, that does not wet surfaces of other solid plastic materials and wets surfaces of semiconductor materials.

4. The electronic component according to claim 1, wherein said plastic coating in the state selected from the group consisting of the softened state and the melted state is adhesive with respect to semiconductor surfaces.

5. The electronic component according to claim 1, wherein said plastic coating includes a material selected from the group consisting of a polymer and a copolymer.

6. The electronic component according to claim 1, wherein said plastic coating includes a thermoplastic.

7. The electronic component according to claim 1, wherein said plastic coating includes a material selected from the group consisting of a colophony, a disproportionated colophony and a esterified colophony.

8. The electronic component according to claim 1, wherein said plastic coating includes a phthalate resin.

9. The electronic component according to claim 1, wherein said plastic coating includes a dimethyl glycol phthalate.

10. The electronic component according to claim 1, wherein said plastic coating includes color pigments.

11. The electronic component according to claim 1, wherein said semiconductor chip includes silicon.

12. The electronic component according to claim 1, wherein said semiconductor chip has a crystal orientation of <100>.

13. A method of producing an electronic component having a semiconductor chip with a rear side and side border regions in which the rear side and the side border regions form outer package sides, the method which comprises:

providing a semiconductor wafer having a rear side and a plurality of semiconductor chips;

immediately before separating individual ones of the plurality of the semiconductor chips, applying a plastic coating having a thickness in a micrometer range to the rear side of the semiconductor wafer;

separating the individual ones of the plurality of the semiconductor chips to obtain separated semiconductor chips;

thermally treating the separated semiconductor chips to perform a function selected from the group consisting of softening the plastic coating and melting the plastic coating;

using the plastic coating on the rear side of one of the separated semiconductor chips to wet corner regions, edge regions, and side border regions of the one of the separated semiconductor chips; and

completing the one of the separated semiconductor chips to form a packaged electronic component in which the rear side and the side border regions of the one of the separated semiconductor chips form outer faces of a package.

14. The method according to claim 13, which comprises using a printing technique to perform the step of applying the plastic coating to the semiconductor wafer.

15. The method according to claim 13, which comprises using a screen printing technique to perform the step of applying the plastic coating to the semiconductor wafer.

16. The method according to claim 13, which comprises using a spraying technique to perform the step of applying the plastic coating to the semiconductor wafer.

17. The method according to claim 13, which comprises using a centrifuging technique to perform the step of applying the plastic coating to the semiconductor wafer.

18. The method according to claim 13, which comprises using an immersion technique to perform the step of applying the plastic coating to the semiconductor wafer.

19. The method according to claim 13, which comprises, during a thermal treatment step that is used to package the one of the separated semiconductor chips, performing the thermally treating step and performing the step of using the plastic coating on the rear side of the one of the separated semiconductor chips to wet the corner regions, the edge regions, and the side border regions of the one of the separated semiconductor chips.

20. The method according to claim 13, which comprises:

providing separating joins for separating the plurality of the semiconductor chips; and

performing the step of applying the plastic coating by selectively applying the plastic coating to the rear side of the semiconductor wafer such that at least all of the separating joins are covered by a width of the plastic coating that corresponds to at least twice a width of the separating joins.

21. The method according to claim 20, which comprises performing the step of selectively applying the plastic coating to the rear side of the semiconductor wafer by spraying plastic of the plastic coating through a mask.

22. The method according to claim 20, which comprises using a printing technique to perform the step of applying the plastic coating to the semiconductor wafer.

23. The method according to claim 20, which comprises using a screen printing technique to perform the step of applying the plastic coating to the semiconductor wafer.

24. The method according to claim 20, which comprises using a spraying technique to perform the step of applying the plastic coating to the semiconductor wafer.

25. The method according to claim 20, which comprises using a centrifuging technique to perform the step of applying the plastic coating to the semiconductor wafer.

26. The method according to claim 20, which comprises using an immersion technique to perform the step of applying the plastic coating to the semiconductor wafer.

27. The method according to claim 20, which comprises, during a thermal treatment step that is used to package the one of the separated semiconductor chips, performing the thermally treating step and performing the step of using the plastic coating on the rear side of the one of the separated semiconductor chips to wet the corner regions, the edge regions, and the side border regions of the one of the separated semiconductor chips.